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09/803,414	03/09/2001	David M. Neal	T268.12-0040	4811

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EXAMINER
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GORDON, BRIAN R

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/803,414

Applicant(s)

NEAL ET AL.

Examiner

Brian R. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 28,30-38 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) 46-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28,30,32-34,37,38 and 45 is/are rejected.
- 7) ☒ Claim(s) 31,35 and 36 is/are objected to.
- 8) ☒ Claim(s) 46-57 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2004 has been entered.

### ***Examiner Comments***

2. In an effort to expedite the prosecution of the case, the examiner placed a call to Bernard G. Pike. The examiner left a message and Mr. Pike and Mr. Wolf returned the examiner's call. The examiner informed applicant claims 28, 30-45 would be allowed if applicant agreed to: (1) submit a terminal disclaimer in view of US Patent 6,706,245 (2) amend the minor errors stated herein below (3) and cancel newly filed claims 46-57. The examiner explained claimed 46 would have been restricted from claim 24 if originally presented (as indicated below). Applicant refused to cancel the claims, asserting the subject matter/inventions of claims 24 and 46 are essentially the same. The examiner disagreed, hence the issuance of instant Office Action.

### ***Election/Restrictions***

3. Newly submitted claims 46-57 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 46 does not require the particulars of claim 24. Such as a needle comprising a bottom, middle,

and top stage each with apertures as claimed. Furthermore, claim 46 does not require the first valve as specifically claimed in 24. New claim 46 is a distinct and different invention that was not previously searched and would have been restricted if originally presented.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 46-57 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Claim Objections***

4. Claims 28, 31, 35 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 28 is directed to limiting the specimen. The specimen is not positively claimed as an element of the invention in claim 45; hence claim 28 does not further limit the structure of the device. Claims 31 and 35 are directed to limiting the solvent. The solvent is not positively claimed as an element of the invention in claim 45, hence claims 31 and 35 do not further limit the structure of the device.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 30, 32-34, 37, 45 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 30, 32-34, and 37 recite "the closed position" and/or "the open position". There is no basis in the claim for the third valve having the closed and open positions. Claim 30 should initially recite "a" rather than "the" to establish basis for the claims that depend upon it.

8. Claim 45 recites the limitation "the first flow path" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim. The basis "a first flow path" follows in line 12.

### ***Double Patenting***

9. Claims 28, 38, and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 10 or 15 of U.S. Patent No. 6,706,245 in view of Lewis et al. US 6,544,799.

Lewis et al. disclose a modular vial autosampler has a storage area for vials containing samples to be analyzed and at least one modular sampling station. A vial transfer mechanism includes an arm having a gripper that lifts a sample vial from the storage section, and the arm moves it to a station for identification and then to a sampling station, and under central control activates the sampling station for obtaining a sample for analysis. The vial transfer mechanism gripper is movable in X, Y, and Z directions to capture and move a selected vial and includes an alignment guide for the vials. Potentiometers are used for providing signals indicating arm position and the

control is provided with updated information for calibration of the potentiometers and also updated position information for the arm relative to a fixed home position is obtained.

Vial storage area 14 includes a fixed or stationary platform shaped to receive removable vial racks 30a, 30b, which vial racks are preferably substantially identical. Specimen-containing vials can be loaded into pockets or receptacles 31 of racks 30a, 30b at a separate location and kept in storage until needed. Preferably, the skirts of racks 30a, 30b slide down over thermal blocks 48a, 48b (one for each rack) which are fixedly mounted to vial storage platform area 14.

A vial can be transported by vial transporter 28 from the equilibration area 16 or directly from the vial storage area 14 to one of the sampling stations 20 or 22 where sampling operations are performed. At each of the sampling stations, a fluid is extracted from the vial. At sampling station 20, a liquid sample from a liquid specimen is extracted from the vial for subsequent sparging to remove volatiles from the liquid sample. At sampling station 22, a sample in the form of a gas or vapor is extracted from the vial during a sparging operation, preferably after injecting a liquid into the vial to contact a liquid or solid (e.g. **soil**) specimen, stirring the resulting mixture, and heating the mixture.

Vial transporter 28 loads and unloads a vial into vial holder 82 at the lowest position. As the elevator raises the vial, a needle assembly 92 punctures the vial septum. Sampling of the vial contents occurs at the highest position, where the needle assembly 92 fully penetrates the vial. Needle assembly 92, well known in the art, has an

inner needle with a port at its lower tip and an outer needle having a port higher up at point 94. At the highest position of the vial, the port at 94 remains above the level of the liquid specimen in the vial while the tip of the inner needle is submerged in the liquid specimen. The inner needle communicates with fitting 96, and the outer needle communicates with fitting 98. In operation, a volume of the liquid specimen is drawn through the center needle and conveyed via fitting 96 to a sparger unit 100 (see FIGS. 1 and 10) on base unit 12 or to an external sparger unit.

A series of sequentially controlled valves, coupled with a syringe type pump provides for the analysis of samples removed from the vials placed in the sampling station.

It is important to note that the system permits backflushing the needles with a water or liquid to remove previous sample traces, utilizing the cup type vial holders to collect the backwash liquid and drain it as previously discussed and shown. A multi port chromatograph valve is utilized to permit selectively adding a known volume of two different standards into the test sample.

FIG. 7 schematically illustrates one arrangement used for sampling liquid or water samples in the station 20. On-off valves C and D control a source of helium 233. Port valve P5 is operated to connect four different ports in response to control signals.

As in the figuration seen figure 7 the needle flow path is in communication with the gas source via valves L and C (cut off from exit port "to concentrator"). The multiport valve may be rotated to a different position where the flow path is in

communication with the exit port. As to the intended use of gas extraction the needle capable of extracting gas from the vessel as well.

Furthermore as illustrated valve J is capable of being position to opened to allow for the syringed to be rinsed and closed to allow communication with helium pressurized gas source.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a valve such as that of Lewis et al. (valve J) which allows for rinsing of the needle.

***Allowable Subject Matter***

10. Claims 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 30-35, and 37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach nor fairly suggest a second flow path in line with the middle stage of the needle; a solvent reservoir; a multi-port valve in line with the second flow path; a pumping means in line with the source of pressurized gas and the multi-port valve and adapted for withdrawing a solvent from the solvent reservoir and adding the solvent to the vial through the second flow path; a third valve in line V:IZ the pumping means and the source of pressurized gas; and the multi-port

valve having at least a first position wherein the pumping means is in line with the solvent reservoir and a second position wherein the pumping means is in line with the second flow path and cut off from the solvent reservoir; whereby withdrawal of the solvent from the solvent reservoir is facilitated by the multi-port valve being in the first position and the third valve being in the closed position, addition of the solvent to the vial is facilitated by the multi-port valve being in the second position and the third valve being in the open position, and a static headspace gas extraction is facilitated by the multi-port valve being in the second position and the third valve being in the open position.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of the letters 'E', 'P', and 'M' in a stylized, cursive font.

brg